

SECTION III—REMARKS

This amendment is submitted in response to the final Office Action mailed January 24, 2006. Claims 1, 19 and 25 are amended, and claims 1-15 and 17-30 remain pending in the application. Applicants respectfully request reconsideration of the application and allowance of all pending claims in view of the above amendments and the following remarks.

Allowable Claims

The Examiner objected to claims 5, 10, 11 and 28 for being dependent on rejected base claims, but indicated that these claims would be allowable if re-written in independent form to include the limitations of their base claims and any intervening claims. As explained below, Applicants believe that, as amended, the base claims from which claims 5, 10, 11 and 28 depend are patentable. Applicants therefore respectfully decline to amend these claims to independent form at this time.

Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 1-4, 6-9, 12-27 and 29-30 under 35 U.S.C § 103(a) as obvious in view of, and therefore unpatentable over, various combinations of the following references: U.S. Patent No. 6,160,707 to Yin ("*Yin*"), U.S. Patent No. 6,304,437 to Foo *et al.* ("*Foo*"), U.S. Patent No. 6,137,790 to Boaz *et al.* ("*Boaz*") and U.S. Patent No. 6,520,805 to Hassanzadeh *et al.* ("*Hassanzadeh*").

Applicants respectfully traverse the Examiner's rejections. To establish a *prima facie* case of obviousness, three criteria must be met: (1) the prior art references must teach or suggest all the claim limitations; (2) some suggestion or motivation to combine the references must be found in the prior art; and (3) there must be a reasonable expectation of success. MPEP § 2143.

As explained below, Applicants respectfully submit that the Examiner has not established a *prima facie* case of obviousness.

Claim 1 was rejected as obvious in view of, and therefore unpatentable over, *Yin* in view of *Foo*. As amended, claim 1 recites an apparatus combination including a printed circuit board (PCB) having at least one set of integrated circuit (IC) pads and first and second power rails, each mounted to the PCB and electrically coupled to a portion of the power supply pads and a portion of said at least one set of IC pads. The first and second power rails are “spaced apart and disposed on opposite sides of said at least one set of IC pads and each power rail has a slotted profile including at least one slot configured to receive a flange on a heatsink.”

The Examiner concedes that *Yin* does not disclose a set of power supply pads to electrically couple one of a power module, power supply circuitry, or connector configured to receive a power module to the PCB, wherein each power rail is connected to the power supply. The Examiner, however, alleges that these deficiencies in *Yin* are disclosed in *Foo*, and concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the disclosures of *Yin* and *Foo* to arrive at the claimed invention.

Applicants respectfully disagree. Applicants previously argued that *Yin* does not disclose, teach or suggest that the retaining posts 12L or 12R do or should supply any power to the PCB 10C, nor that these retaining posts are coupled in any way to an electrical power source. *Yin* instead teaches that the retaining posts 12L and 12R are for the sole purpose of holding the PCB assembly and that power is supplied to the PCB 10C exclusively through the socket 12E. Retaining posts 12L and 12R therefore cannot, as the Examiner alleges, be considered to be “first and second power rails, each mounted to the PCB and electrically coupled to a portion of the power supply pads and a portion of said at least one set of IC pads.”

The Examiner countered Applicants' arguments by characterizing the device of *Yin* such that the entire body 12R, 12M and 12L comprises the first and second power rails. In the Examiner's characterization post 12R, combined with half the base portion 12M that the Examiner alleges is formed as part of the post 12R, forms a first power rail. Similarly, post 12L, combined with half the base portion 12M that the Examiner alleges is formed as part of the post 12L, forms a second power rail.

Even if the Examiner's characterization of *Yin* was correct, which Applicants do not concede, *Yin* and *Foo* could not obviate the claim. Under the Examiner's characterization of *Yin*, the two power rails must be joined together because both halves of the base portion 12M are joined together into a continuous piece. The power rails of *Yin*, as characterized by the Examiner, therefore cannot be considered first and second power rails that are "spaced apart and disposed on opposite sides of said at least one set of IC pads and each power rail has a slotted profile including at least one slot configured to receive a flange on a heatsink." Because *Foo* does not make up for the deficiencies of *Yin*, *Yin* and *Foo* taken together cannot obviate the claim. Applicants therefore respectfully request withdrawal of the rejection and allowance of the claim.

Regarding claims 2-4, 6-9 and 12-18, if an independent claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is also non-obvious. MPEP § 2143.03; *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). As discussed above, claim 1 is in condition for allowance. Applicants respectfully submit that claims 2-4, 6-9 and 12-18 are therefore allowable by virtue of their dependence on an allowable independent claim, as well as by virtue of the features recited therein. Applicants therefore respectfully request withdrawal of the rejections and allowance of these claims.

Claim 19 was rejected as obvious in view of, and therefore unpatentable over, *Yin* in view of *Foo*. As amended, claim 19 recites an apparatus combination including a printed circuit board (PCB) having a power supply means and a first integrated circuit (IC), first and second power rails “spaced apart and disposed on opposite sides of the first integrated circuit, each power rail having a slotted profile including at least one slot configured to receive a flange on a heatsink,” means for electrically coupling power outputs from the power supply means to each of the first and second power rails and means for electrically coupling each of the first and second power rails to the first IC and means for coupling the first and second power rails to the PCB. By analogy to the discussion above for claim 1, Applicants submit that *Yin* and *Foo* cannot render the claim obvious. Applicants therefore respectfully request withdrawal of the rejection and allowance of the claim.

Regarding claims 20-24, if an independent claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is also non-obvious. MPEP § 2143.03; *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). As discussed above, claim 19 is in condition for allowance. Applicants respectfully submit that claims 20-24 are therefore allowable by virtue of their dependence on an allowable independent claim, as well as by virtue of the features recited therein. Applicants therefore respectfully request withdrawal of the rejections and allowance of these claims.

Claim 25 was rejected as obvious in view of, and therefore unpatentable over, *Yin* in view of *Foo*. As amended, claim 25 recites a method combination including routing power to a first integrated circuit (IC) on a printed circuit board (PCB) via first and second power rails coupled to the PCB, “the first and second power rails being spaced apart and disposed on opposite sides of the first IC.” By analogy to the discussion above for claim 1, Applicants submit that *Yin* and

Foo cannot render the claim obvious. Applicants therefore respectfully request withdrawal of the rejection and allowance of the claim.

Regarding claims 26, 27, 29 and 30, if an independent claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is also non-obvious. MPEP § 2143.03; *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). As discussed above, claim 25 is in condition for allowance. Applicants respectfully submit that claims 26, 27, 29 and 30 are therefore allowable by virtue of their dependence on an allowable independent claim, as well as by virtue of the features recited therein. Applicants therefore respectfully request withdrawal of the rejections and allowance of these claims.

Conclusion

Given the above amendments and accompanying remarks, all claims pending in the application are in condition for allowance. If the undersigned attorney has overlooked a teaching in any of the cited references that is relevant to allowance of the claims, the Examiner is requested to specifically point out where such teaching may be found. Further, if there are any informalities or questions that can be addressed via telephone, the Examiner is encouraged to contact the undersigned attorney at (206) 292-8600.

Charge Deposit Account

Please charge our Deposit Account No. 02-2666 for any additional fee(s) that may be due in this matter, and please credit the same deposit account for any overpayment.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

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Todd M. Becker
Attorney for Applicant(s)
Registration No. 43,487

Blakely, Sokoloff, Taylor & Zafman LLP
12400 Wilshire Boulevard, Seventh Floor
Los Angeles CA 90025-1030
Phone: 206-292-8600
Facsimile: 206-292-8606

Enclosures: Amendment transmittal, in duplicate